

Claims

1. An apparatus for aligning an item (2) that can be deformed easily, at least in the region of the  
5 outer lower edge, such as a stack of items comprising in particular flat structures made of a flexible material, such as paper or the like, on a transport substrate (1), such as a pallet, at least one aligning device (5) that can be  
10 displaced in the direction of the item (2) and the transport substrate (1) being provided to align the item on the transport substrate (1), characterized in that at least the subregion of at least one aligning device (5) which comes into  
15 contact with the lower region of the item (2) projecting laterally beyond the outer contour of the transport substrate (1) during the alignment of the item (2) on the transport substrate (1) is assigned a stabilizing device (8) which prevents  
20 the item (2) being deflected in the direction of the transport substrate (1).
2. The apparatus as claimed in claim 1, characterized in that the stabilizing device (8) includes a  
25 layer which inhibits slipping.
3. The apparatus as claimed in claim 1 or 2, characterized in that the stabilizing device (8) includes a compliant element.  
30
4. The apparatus as claimed in claim 3, characterized in that the element is made of rubber.
5. The apparatus as claimed in one of claims 1 to 5,  
35 characterized in that the stabilizing device (8) comprises a supporting device for supporting the item (2).

6. The apparatus as claimed in one of claims 1 to 5, characterized in that the stabilizing device (8) has a supporting surface adjoining the contact surface of the transport substrate (1) laterally at a short distance, at least during the alignment, and at least approximately aligned with the contact surface.

5

7. The apparatus as claimed in one of claims 1 to 6, characterized in that the aligning device (5) is formed in many parts, at least in an upper and a lower segment (13, 14), in relation to the height of the item (2), and the stabilizing device (8) is provided at least on the lower segment (14).

10

8. The apparatus as claimed in claim 7, characterized in that the adjacent edges (15, 16) have mutually at least approximately corresponding edge curves with projecting and set-back subregions and in particular are formed in the shape of a wave and interengaging.

15

9. A method for aligning an item (2) that can be deformed easily, at least in the region of the outer lower edge, such as a stack of items comprising in particular flat structures made of a flexible material, such as paper or the like, on a transport substrate (1), such as a pallet, at least one aligning device (5) that can be displaced in the direction of the item (2) and the transport substrate (1) being provided to align the item on the transport substrate (1), characterized in that a deflection of the lower region of the item (2) projecting laterally beyond the outer contour of the transport substrate (1) is prevented by a stabilizing device (8) which is assigned to at least the subregion of the aligning device (5) which comes into contact with the region of the item (2) projecting laterally beyond

20

25

30

35

the outer contour of the transport substrate (1) during the alignment of the item (2) on the transport substrate (1).

5 10. The method as claimed in claim 9, characterized in that, before the alignment of the item (2) on the transport substrate (1), the transport substrate (1) is its part aligned in relation to at least one aligning device (5).

10

11. The method as claimed in claim 9 or 10, characterized in that, in order to reduce friction between the underside of the item (2) and the contact surface of the transport substrate (1), a friction-reducing layer can be provided.

15

12. The method as claimed in claim 11, characterized in that a thin sheet is laid on the transport substrate (1) as a layer before the loading of the transport substrate (1) with the item (2).

20

13. The method as claimed in claim 11 or 12, characterized in that a film, in particular an oil film, is applied to the underside of the item (2) as a layer.

25